

Assignee: Intel Corporation

IN THE CLAIMS

Presented below is a complete listing of the claims.

1 Claims 1 through 19 (cancelled)

1 20. (New) An apparatus, comprising:
2 a first register file of a plurality of register files to store predicate
3 values; and
4 a second register file of said plurality of register files to receive
5 results from execution of a first instruction that writes to multiple
6 predicate registers when said first register file is busy.

1 21. (New) The apparatus of claim 20, further comprising a
2 select register to indicate which of said plurality of register files is being
3 written to by execution of a second instruction that writes to multiple
4 predicate registers.

1 22. (New) The apparatus of claim 21, wherein said select
2 register includes a pointer to said which of said plurality of register
3 files.

1 23. (New) The apparatus of claim 20, wherein said first register
2 file indicates that is it busy with a scoreboard.

1 24. (New) The apparatus of claim 23, wherein said apparatus
2 stalls execution of a third instruction that writes to at most two
3 predicate registers when said scoreboard indicates destination registers
4 of said third instruction are busy.

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1 25. (New) The apparatus of claim 20, further comprising a free
2 file list to point to the next in order of said plurality of register files that
3 is not busy.

1 26. (New) The apparatus of claim 25, wherein said free file list
2 indicates which of said plurality of register files are to be de-allocated.

1 27. (New) A method, comprising:
2 storing predicate values in a first register file of a plurality of
3 register files; and
4 allocating a second register file to receive results from execution
5 of a first instruction that writes to multiple predicate registers when
6 said first register file is busy.

1 28. (New) The method of claim 27, further comprising
2 indicating which of said plurality of register files is being written to by
3 execution of a second instruction that writes to multiple predicate
4 registers.

1 29. (New) The method of claim 28, wherein said indicating
2 includes using a select register to point to said which of said plurality of
3 register files.

1 30. (New) The method of claim 27, further comprising
2 indicating busy status with a scoreboard.

1 31. (New) The method of claim 30, further comprising stalling
2 execution of a third instruction that writes to at most two predicate
3 registers when said scoreboard indicates destination registers of said
4 third instruction are busy.

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1 32. (New) The method of claim 27, further comprising pointing
2 to a next in order one of said plurality of register files that is not busy.

1 33. (New) The method of claim 32, further comprising de-
2 allocating one of said plurality of register files when said pointing
3 indicates a earlier in order one of said plurality of register files is not
4 busy.

1 34. (New) A system, comprising:
2 a processor including a first register file of a plurality of register
3 files to store predicate values, and a second register file of said plurality
4 of register files to receive results from execution of a first instruction
5 that writes to multiple predicate registers when said first register file is
6 busy;
7 an interface logic to couple said processor to input/output
8 devices; and
9 a disk drive logic coupled to said processor via said interface
10 logic.

1 35. (New) The system of claim 34, wherein said processor
2 includes a select register to indicate which of said plurality of register
3 files is being written to by execution of a second instruction that writes
4 to multiple predicate registers.

1 36. (New) The system of claim 34, wherein said first register
2 file indicates that is it busy with a scoreboard.

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1 37. (New) The system of claim 36, wherein said processor stalls
2 execution of a third instruction that writes to at most two predicate
3 registers when said scoreboard indicates destination registers of said
4 third instruction are busy.

1 38. (New) The system of claim 34, wherein said processor
2 includes a free file list to point to the next in order of said plurality of
3 register files that is not busy.